

Municipality/Organization: Tyngsborough

EPA NPDES Permit Number: MAR051229

MaDEP Transmittal Number: W-063705

**Annual Report Number
& Reporting Period:**

No. 2: March 04-March 05

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Lori Capone

Title: Director of Conservation

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:



Printed Name: Paul Boushell

Title: Town Administrator

Date: 5/3/05

Part II. Self-Assessment

2004 was a year of financial and personnel cuts for the Town of Tyngsborough. As the Department of Planning and Community Development was dissolved in 2003, all duties set forth in the original permit under the Department of Planning and Community Development have been absorbed by the Conservation Department who's budget and personnel have been decreased significantly this year and will more than likely be further reduced for FY06. Despite personnel turnover and fiscal constraints, the Town of Tyngsborough accomplished almost all of the proposed activities set forth in our permit application.

1. ***Public Education and Outreach:*** The Town was unable to successfully completed BMPs 1 and 2. A stormwater pamphlet will be developed in Permit Year 3 with distribution through tax bills only because neither sewer nor water bills reach all residents. Additionally, the school department will develop and execute a stormwater poster design program in Year Three. Only two articles regarding stormwater management were published this year due to reduction in personel. However, the Highway Department was able to stencil 116 of the total 1336 catch basins this year.
2. ***Public Involvement and Participation:*** The Board of Selectmen have not held any public meetings regarding stormwater management this year. The Board of Health will hold their regularly scheduled Hazardous Waste Day on May 7, 2005. Due to budgetary constraints and reduction in personel, the Conservation Department will develop a water quality monitoring program and establish stream clean-up days in Year Three with local boy and girl scout groups.
3. ***Illicit Discharge Detection and Elimination:*** Due to budgetary constraints the Town did not purchase a GIS system to map any additional catch basins this year. All departments have fulfilled BMP #14 requiring employee training for spill prevention. A comprehensive Hazardous Materials Release Plan for the Town has been completed for adoption this Fall. The Highway Department has begun wet and dry weather inspections of priority outfalls. An INI Study completed in May 2002 showed very minor infiltration of stormwater into the sewer system. The Sewer Department has also purchased a camera package to inspect the sewer line and all connections. The Board of Health has provided a 24/7 hotline for detection of failed septic systems. The Conservation Commission is revising their regulations to prohibit dumping into the drainage system. The Planning Board is in the process of revising their regulations also.
4. ***Construction Site Stormwater Runoff Control:*** The Conservation Commission is in the process of revising their rules and regulations requiring detailed stormwater pollution plans with signed affidavit that conditions will be met. The Planning Board will be revising their Subdivision Rules and Regulations for construction site runoff control to reference the DEP Stormwater Management Policy. In addition the Definitive and Special Permit filing requirements will be modified to require an Erosion Control Plan which would include:
 - a. Construction methods to prevent erosion and degradation of resource areas;
 - b. Methods for controlling and treating stormwater;
 - c. Inspection schedule and method to complete required maintenance of proposed drainage structures; and
 - d. Document compliance with the State Storm Water Management Policy.

5. ***Post-construction Stormwater Management in New Development and Redevelopment:*** The Planning Board will be revising their subdivision rules and regulations requiring long-term maintenance of stormwater facilities and minimizing impacts to water quality. The Planning Board will also prepare a zoning bylaw for control of post development runoff. The Conservation Commission is revising their regulations to require submission of a long-term maintenance plan for stormwater management facilities.
6. ***Pollution Prevention and Good Housekeeping in Municipal Operations:*** All BMPs for this requirement have been satisfactorily completed.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
1	Develop pamphlet on stormwater	Stormwater Committee, Conservation Department	Distribute with water, sewer, tax bills	Due to personnel turnover, have not developed yet. Will do for next distribution of tax bills.	Continued dispersal with tax bills.
Revised					
2	Develop stormwater poster design program	Stormwater Committee, Conservation Department, School Dept.	Annual contest by students	Due to scheduled conflicts will execute in Year Three.	Annual contest.
Revised					
3	Develop pamphlet on household waste disposal	Board of Health	Distribute with Hazardous Waste collection info	Developed and distributed at the Health Fair on March 20, 2004.	Continued distribution at Health Fair and Hazardous Waste Day.
Revised					
4	Guide for home, school, restaurant for grease traps.	Board of Health	Distribute at Health Fair, with septic approvals and inspections.	Developed and distributed at the Health Fair.	Continue distributing.
Revised					
5	Articles in newsletter	Conservation Agent	Quarterly articles on related topics.	Due to personnel and budgetary cuts only two articles were published this year: 1. Making Your Home the Solution to Stormwater Pollution and 2. Tips for Earth-Friendly Lawn-care	Will continue with quarterly articles on related topics.
Revised					
6	Health Fair	Board of Health	Annual booth on Stormwater	Completed. Health Fair held April 30, 2005	Will display stormwater information at Health Fair next year.
Revised					
7	Catch basin stencil program	Highway Department	Stencil catch basins over three years.	Have stenciled 116 of the total 1336 catch basins in Town.	Will continue stenciling program and time and money permits.
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
8	Public hearings on SWMP with annual review and comment	Selectmen, Stormwater Committee	Two public meetings on SWMP. Draft on website	No meetings held. Due to personnel turnover, plan is not developed.	Plan will be developed and placed on website within the year.
Revised					
9	Create Stormwater Advisory Committee	Selectmen, Stormwater Committee	Meet twice annually for review of program.	Due to timing conflicts, Committee did not meet but communicated through correspondence.	Meet annually to review program.
Revised					
10	Volunteer water quality monitoring program	Conservation Department	Develop program Year 2, annual testing thereafter	Due to personnel and budgetary cuts, a volunteer water quality monitoring program will be developed in Year 3.	Develop water quality monitoring program
Revised					
11	Volunteer stream clean-up days	Conservation Department	Annual cleanup of selected streams	Due to personnel and budgetary cuts, adopt-a-stream program will be developed in Year 3.	Develop adopt-a-stream program.
Revised					
12	Hazardous Waste Collection Day	Board of Health	Annual collection of hazardous materials	Hazardous Waste Day scheduled for May 7, 2005	Annual Hazardous Waste Day
Revised					
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
13	GIS mapping of outfalls and receiving waters	Conservation Department, Highway Department	Portions of Town to be done annually	Due to budgetary constraints, the Town was unable to purchase a GIS system to map outfalls. Will try to purchase in Year Three	Town to purchase GPS system.
Revised					
14	Employee training on spill prevention	School, Water, Highway, Sewer Depts.	Annual Training	Completed	Training will continue on spill prevention.
Revised					
15	Response plan for hazardous spills	Local Emergency Management Committee	Develop and implement plan for employees and public	A Comprehensive Hazardous Materials Release Plan for the Town has been completed.	I anticipate this plan to be adopted by the Town this Fall.
Revised					
16	Wet & dry weather inspections for priority outfalls	Highway	Identify likely areas, perform annually	Starting performing wet and dry inspections	Continue sampling program.
Revised					
17	Modify bylaws to prohibit dumping into storm systems	Planning Board, Conservation Commission, Selectmen	Develop bylaw for town meeting vote.		Will develop in Year Two for possible adoption in Year Three
Revised					
18	Monitor illicit discharges into sewer & stormwater systems	Sewer	Identify likely portions of town and monitor annually.	INI Study completed in May 2002. Infiltration into sewer system very minor. Will address the pumping of basements into the sewer system through public education. Department purchased a camera package to inspect sewer lines.	Initiate inspection of possible illegal connections and propose dye testing this summer along with using the camera to insure that all connections are approved and tested for discharge parameters.
Revised					
19	Detection of failed septic systems	Board of Health	Provided Hotline for public	Two telephone lines are connected to the Board of Health office 24 hours a day with voice mail.	Continue to provide hotline.
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
20	Enhance zoning for sediment and erosion control	Planning Board, Conservation Commission	Prepare zoning bylaw for town meeting vote		Will develop in Year Two for possible adoption in Year Three
Revised					
21	Revise site plan, subdivision, conservation regulations	Planning Board, Conservation Commission	Revise to require stormwater pollution prevention plan.	Conservation Commission revising regulations this year.	Planning Board will develop in Year Two for possible adoption in Year Three
Revised					
22	Develop regulations for erosion and sedimentation	Conservation, Planning Board, Selectmen	Regulations including control of waste & portable toilets		Will develop in Year Two for possible adoption in Year Three
Revised					
23	Revise site plan & subdivision regulations	Planning Board, Conservation Commission, Selectmen	Regulations including inspection and enforcement in Bond amount		Will develop in Year Two for possible adoption in Year Three
Revised					
24	Revise site plan & subdivision regulations	Planning Board, Conservation Commission, Selectmen	Regulations including signed affidavit that conditions will be met.		Will develop in Year Two for possible adoption in Year Three
Revised					
Revised					

4a. Additions

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
25	Modify zoning for control of post development runoff	Planning Board, Highway	Prepare zoning bylaw for town meeting vote		Will develop in Year Two for possible adoption in Year Three
Revised					
26	Modify site plan & subdivision regulations for maintenance	Planning Board, Conservation Commission, Selectmen	Regulations including long term maintenance of stormwater		Will develop in Year Two for possible adoption in Year Three
Revised					
27	Modify site plan & subdivision regulations for water quality	Planning Board, Conservation Commission, Selectmen	Regulations including minimizing impacts to water quality		Will develop in Year Two for possible adoption in Year Three
Revised					
Revised					
Revised					
Revised					

5a. Additions

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
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28	Training program for town employees	School, Water, Highway, Sewer, Emergency Management Committee	Annual training for fertilizer, snow, dumping, maintenance and waste	Not completed due to budgetary constraints.	Will develop training program.
Revised					
29	Street Sweeping	Highway	Annual sweeping of streets	Street sweeping began the first week in April.	Will continue to sweep streets first chance in the spring.
Revised					
30	Catch basin cleaning	Highway	Annual cleaning of basins	Catch basin cleaning began the third week in March	Will continue to clean catch basin first chance in the spring
Revised					
31	Water main flushing with dechlorination	Water	Annual flushing after street sweeping	Completed after street sweeping completed	Will continue to flush water main first chance in spring after street sweeping completed.
Revised					
32	Spill kits at municipal facilities	All Depts.	Annual Training	All municipal buildings have spill kits. Fire, Highway, Board of Health, Conservation, and most of the Police Dept. have had HAZMAT 1 st Response Awareness training.	
Revised					
33	TV or inspect all sewer lines in 20 years	Sewer, Highway	Develop plan in five years	Sewer Department purchased a camera package to inspect sewer lines.	Initiate inspection of possible illegal connections and propose dye testing this summer along with using the camera to insure that all connections are approved and tested for discharge parameters.
Revised					
34	Develop salt alternatives for sensitive areas	Highway	Develop and purchase in two years	Researching alternatives. Uses reduced salt/sand mixture in sensitive areas.	Will continue to research alternatives.
Revised					
35	Inspect and maintain salt shed	Highway	Annual inspection	Deicing materials storage facility continually monitor with close scrutiny at the end and beginning of each season	Continued monitoring
Revised					

6a. Additions

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

No sampling was performed this year.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	NO
Annual program budget/expenditures	(\$)	0

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	75 %
Stormwater management committee established	(y/n)	YES
Stream teams established or supported	(# or y/n)	NO
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	NO
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1
▪ community participation	(%)	10%
▪ material collected	(tons or gal)	3100 gal
School curricula implemented	(y/n)	NO

Legal/Regulatory

	In Place Prior to Phase II Drafted	Under Review Adopted	
Regulatory Mechanism Status (indicate with "X")			
▪ Illicit Discharge Detection & Elimination			
▪ Erosion & Sediment Control			
▪ Post-Development Stormwater Management			
Accompanying Regulation Status (indicate with "X")			
▪ Illicit Discharge Detection & Elimination			

▪ Erosion & Sediment Control			X
▪ Post-Development Stormwater Management			X

Mapping and Illicit Discharges

Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened	(# or %)	
Illicit discharges identified	(#)	
Illicit connections removed	(#) (est. gpd)	
% of population on sewer	(%)	30%
% of population on septic systems	(%)	70%

Construction

Number of construction starts (>1-acre)	(#)	25
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	100

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections completed	(# or %)	100%
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1/yr
Total number of structures cleaned	(#)	1,336
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	Not weighed
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Screened for loam
Cost of screenings disposal	(\$)	Free

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1/yr
Qty. of sand/debris collected by sweeping	(lbs. or tons)	Not weighed
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Screened for loam
Cost of sweepings disposal	(\$)	None
Vacuum street sweepers purchased/leased	(#)	None
Vacuum street sweepers specified in contracts	(y/n)	No

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	100 lbs.
▪ Herbicides	(lbs. or %)	4 gals.
▪ Pesticides	(lbs. or %)	N/A

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	33% 67%
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	No
Automatic or Zero-velocity spreaders used	(y/n)	Yes
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	Yes

Storage shed(s) in design or under construction	(y/n)	No